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ABSTRACT

Interest is growing in naturalistic inquiry and qualitative methods in educational inquiry. Naturalistic inquiry refers to a paradigm of inquiry with two major features: a low degree of manipulation or control of the variables prior to the inquiry and a low degree of constraints imposed on the outcomes of the inquiry. Qualitative methods seek to describe not the frequency but the behaviors, beliefs, and feelings of the respondents in a setting. Qualitative data are direct quotations, observations, personal impressions, analyses of records and documents, summaries of unobtrusive measures, and case studies. The interview is probably the most frequently used method of those available to gather qualitative data. Although naturalistic inquiry requires instruments that are flexible and adaptive to the setting--instruments that are almost always qualitative in nature--qualitative methods may also be used with the experimental paradigm. The use of qualitative methods has relevance to the practice of training and development. For example, use of a naturalistic inquiry approach might help a training manager portray more accurately the worth of the training department to the organization than would counting the number of course offerings or trainees per year. (15 references) (YLB)

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Naturalistic Inquiry and Qualitative Methods: Implications for Training and Development

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TRAINING & DEVELOPMENT

RESEARCH REPORT

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EDITOR'S PREFACE

This Research Report presents a discussion of two topics that have been of interest to many training and development professionals, naturalistic inquiry and qualitative methods. Much of this interest stems from the growing dissatisfaction with the sole use of quantitative measures to collect data for needs assessments, needs/task analyses, or training evaluations. As practitioners, we know that the use of numbers to represent reality has a place in our professional practice. We also know that the settings in which we work are complex, diverse, interesting, and frustrating. Naturalistic inquiry and qualitative methods are alternate approaches that have been proposed to better understand these phenomena in our organizations.

As a result, many training departments are now using more open-ended interviews or observations at times when they may have used a quantitative measure such as a questionnaire. I know this is true from my own four years of experience in the Professional Education Division at Arthur Andersen and Company. The essence of the argument seems to be that we can't invest all of our efforts in one technique or approach to help solve human performance problems. We should use those techniques that help us do our jobs more effectively and efficiently.

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Naturalistic Inquiry and Qualitative Methods:

Implications for Training and Development

There is a growing interest in naturalistic inquiry and qualitative methods in educational inquiry. Case studies, research reports, and position papers regarding these topics are appearing with greater frequency in many journals (See e.g., Shrock, 1985; Jacobs, 1985). A major issue addressed in many of these papers is that the accepted inquiry paradigm (known as the experimental or scientific) and related methods (primarily quantitative) have often resulted in non-significant differences between treatment and control groups. Furthermore, the inquirer is constrained from assessing other aspects of the setting because the information is not amenable to quantification. More and more inquirers (many of them from the training and development field) are suggesting an alternate inquiry paradigm, called naturalistic inquiry, and the increased use of qualitative methods. This report will briefly define these terms and discuss their relevance to training and development.

Naturalistic Inquiry

Readers of the current literature may have noted that no one term has been consistently used to describe the same, alternate inquiry paradigm. Many different terms are used, including: ethnographic, phenomenologic, humanistic, qualitative, naturalistic. Each term generally refers to the social science field from which it has emerged, for example anthropology, sociology, psychology, or education. The term naturalistic has been used by many authors since it appears to be logically consistent with one of the basic tenets of the alternate

paradigm--the inquiry is conducted in the natural setting, not in an artificial or laboratory setting.

Naturalistic inquiry refers to a paradigm of inquiry. An inquiry paradigm is a guiding model that inquirers use to help them order and understand real-world complexities. Lincoln and Guba (1985) describe a paradigm as "a systematic set of beliefs, together with their accompanying methods" (p. 15). The naturalistic inquiry paradigm can be described as having two major features: (1) a low degree of manipulation or control of the variables antecedent to the inquiry and (2) a low degree of constraints imposed on the outcomes of the inquiry. Inquiry conducted from the experimental paradigm, on the other hand, attempts to have a high degree of control on both antecedent and output variables. Guba and Lincoln (1981) have identified certain postures that reflect the differences between the scientific and naturalistic paradigms. Some key differences are summarized in Table 1.

It should be noted that there are no criteria or guidelines available to select one inquiry paradigm over another for a particular problem. In practice, training and development professionals must be responsive to many factors when collecting information in their settings, such as the goals of the inquiry and the information requirements of the organization. As a result, the consideration of which approach to the inquiry is most appropriate has been based primarily on professional judgment.

Qualitative Methods

Qualitative methods seek to describe not the frequency, but the behaviors, beliefs, and feelings of the respondents in a setting. Qualitative data are represented as direct quotations, observations, personal impressions, analyses of records and documents, summaries of

unobtrusive measures, case studies, and the like. Of the variety of methods available to gather qualitative data, the interview is probably the most frequently used technique. For example, many practitioners use the interview in an adaptive mode to help gather job analysis information. An astute analyst can respond to comments made by the subject-matter expert to gather less obvious information, such as critical incidents or time-savers, that may contribute to effective job performance, as well as to record the major job duties, tasks, and steps.

The use of qualitative methods should not be equated in all cases with the naturalistic inquiry paradigm. In practice, naturalistic inquiry requires instruments that are flexible and adaptive to the setting. These instruments are almost always qualitative in nature. Qualitative methods, however, may be used with the experimental paradigm, as well. The perspective of the inquirer, and other noted considerations, determine the paradigm, not by the method used alone.

The rigor of qualitative data analysis has also been a concern of many inquirers. The results form using qualitative methods may appear less objective, reliable, or valid that the results from using quantitative methods. Miles and Huberman (1984) present many useful guides for the systematic analysis of qualitative data. Guba (1981) and Guba and Lincoln (1981) have offered analogous terms and techniques for determining the trustworthiness of naturalistic inquiry.

Relevance to Training and Development

The use of an alternate inquiry paradigm and qualitative methods has relevance to the practice of training and development. Conventional assumptions and methods have, in many cases, restricted the data we have used to help answer complex organizational questions. For example, the use of a naturalistic inquiry approach might help a training manager

portray more accurately the worth of the training department to the organization than counting the number of course offerings or trainees per year. Or, on-the-job interviews and observations conducted after a training program might provide more descriptive information about the validity of the training goals than by requesting trainee reactions on a questionnaire.

This has been a brief and, thus, incomplete description of two very complex topics. Readers are urged to refer to the references and bibliography presented at the conclusion. As such, it may be noted that the use of qualitative methods may require additional knowledge and skills since most practitioners have been trained to use quantitative methods only. The arguments supporting the use of naturalistic inquiry and qualitative methods are compelling. At the very least, an understanding of these ideas might, when possible, lead to results that have greater relevance and descriptiveness when gathering information to help improve human performance.

Table 1.
Summary of Postures of the Scientific and Naturalistic Paradigms*

	Paradigm	
Posture	Scientific	Naturalistic
Preferred techniques	Quantitative--questionnaires, ratings, tests	Qualitative--interviews, observations, documents
Quality criterion	Research rigor	Relevant and understandable results
Source of theory	A PRIORI--data used to verify theory	Grounded--theory emerges from data
Questions of casuality	Linear cause-effect relationships	Patterns of relationships within context "mutual shaping"
Knowledge types used	Knowledge stated in language form only	Knowledge stated in language form and tacit knowledge also
Instruments	Inflexible instruments paper-&-pencil tests, devices	Flexible and adaptive, human as instrument
Purpose	Verify hypotheses, and relationships	Discover new relationships
Design	Preordinate, established before inquiry begins	Emergent, evolves during and after inquiry
Setting	Controlled, laboratory or contrived setting	Variable, natural setting

*Adapted from Guba & Lincoln (1981)

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Ronald L. Jacobs is an assistant professor at The Ohio State University, Department of Educational Policy and Leadership. Dr. Jacobs coordinates the graduate specialization in Training and Development, and instructs courses in performance technology and instructional design. He has consulted with numerous organizations and has used qualitative methods extensively to gather information within those organizations to help improve human performance.